

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-44. (Cancelled).

1 45. (Currently amended) A machine-implemented method, comprising the steps of:
2 a service requestor using an Internet Protocol (IP) address to access address
3 requests to a service provided by a first node within a cluster, wherein said
4 first node is configured to provide said service to requests addressed to
5 said IP address;

6 in response to said first node becoming unavailable, automatically configuring a
7 second node of the cluster to respond to requests associated with addressed
8 to said IP address;

9 after said first node becomes unavailable, the service requestor using said IP
10 address to send address a message to said cluster related to said service;
11 and

12 in response to said message, said second node of the cluster sending a response
13 that indicates an error condition.

1 46. (Currently amended) The method of Claim 45, further comprising the steps of:
2 upon receiving said response, the service requestor identifying a second IP address
3 to access said service; and
4 the service requestor using said second IP address to send address a second
5 message to said cluster related to said service.

1 47. (Previously presented) The method of Claim 45, further comprising the step of:
2 storing, at the first node, information identifying one or more nodes of the cluster
3 as being standby nodes, wherein each of the one or more standby nodes
4 may be instructed to provide the service if the first node becomes
5 unavailable.

- 1 48. (Previously presented) The method of Claim 45, further comprising the step of:
2 in response to said first node becoming unavailable, determining if said first node
3 is configured to allow the service to be provided by another node of the
4 cluster.
- 1 49. (Previously presented) The method of Claim 48, further comprising the step of:
2 in response to determining said first node is configured to allow the service to be
3 provided by another node of the cluster, determining a standby node of the
4 cluster to perform the service; and
5 instructing the standby node to perform the service.
- 1 50. (Previously presented) The method of Claim 45, further comprising the steps of:
2 in response to said first node becoming unavailable, instructing a standby node of
3 the cluster to perform the service;
4 determining if the plurality of services provided by the standby node may be
5 provided by another node of the cluster; and
6 if the plurality of services provided by the standby node may not be provided by
7 another node of the cluster, configuring the standby node to disallow the
8 plurality of services to be provided by another node of the cluster.
- 1 51. (Previously presented) The method of Claim 50, further comprising the step of:
2 in response to configuring the standby node to disallow the plurality of services to
3 be provided by another node of the cluster, issuing an alert to a user.
- 1 52. (Previously presented) The method of Claim 45, wherein said first node comprises
2 a monitor process, and wherein said monitor process is configured to detect if said
3 first node becoming unavailable.
- 1 53. (Currently amended) A machine-readable medium carrying one or more
2 sequences of instructions, wherein execution of the one or more sequences of
3 instructions by one or more processors causes the one or more processors to
4 perform the steps of, comprising the steps of:

5 a service requestor using an Internet Protocol (IP) address to access address
6 requests to a service provided by a first node within a cluster, wherein said
7 first node is configured to provide said service to requests addressed to
8 said IP address;
9 in response to said first node becoming unavailable, automatically configuring a
10 second node of the cluster to respond to requests associated with addressed
11 to said IP address;
12 after said first node becomes unavailable, the service requestor using said IP
13 address to send address a message to said cluster related to said service;
14 and
15 in response to said message, said second node of the cluster sending a response
16 that indicates an error condition.

1 54. (Currently amended) The machine-readable medium of Claim 53, wherein
2 execution of the one or more sequences of instructions by the one or more
3 processors causes the one or more processors to perform the steps of:
4 upon receiving said response, the service requestor identifying a second IP address
5 to access said service; and
6 the service requestor using said second IP address to send address a second
7 message to said cluster related to said service.

1 55. (Previously presented) The machine-readable medium of Claim 53, wherein
2 execution of the one or more sequences of instructions by the one or more
3 processors causes the one or more processors to perform the step of:
4 storing, at the first node, information identifying one or more nodes of the cluster
5 as being standby nodes, wherein each of the one or more standby nodes
6 may be instructed to provide the service if the first node becomes
7 unavailable.

1 56. (Previously presented) The machine-readable medium of Claim 53, wherein
2 execution of the one or more sequences of instructions by the one or more
3 processors causes the one or more processors to perform the step of:

4 in response to said first node becoming unavailable, determining if said first node
5 is configured to allow the service to be provided by another node of the
6 cluster.

1 57. (Previously presented) The machine-readable medium of Claim 56, wherein
2 execution of the one or more sequences of instructions by the one or more
3 processors causes the one or more processors to perform the step of:
4 in response to determining said first node is configured to allow the service to be
5 provided by another node of the cluster, determining a standby node of the
6 cluster to perform the service; and
7 instructing the standby node to perform the service.

1 58. (Previously presented) The machine-readable medium of Claim 53, wherein
2 execution of the one or more sequences of instructions by the one or more
3 processors causes the one or more processors to perform the steps of:
4 in response to said first node becoming unavailable, instructing a standby node of
5 the cluster to perform the service;
6 determining if the plurality of services provided by the standby node may be
7 provided by another node of the cluster; and
8 if the plurality of services provided by the standby node may not be provided by
9 another node of the cluster, configuring the standby node to disallow the
10 plurality of services to be provided by another node of the cluster.

1 59. (Previously presented) The machine-readable medium of Claim 58, wherein
2 execution of the one or more sequences of instructions by the one or more
3 processors causes the one or more processors to perform the step of:
4 in response to configuring the standby node to disallow the plurality of services to
5 be provided by another node of the cluster, issuing an alert to a user.

1 60. (Previously presented) The machine-readable medium of Claim 53, wherein said
2 first node comprises a monitor process, and wherein said monitor process is
3 configured to detect if said first node becoming unavailable.